

AMENDMENTS TO THE CLAIMS:

1-6 (Cancelled)

7. (Previously presented) A method for correcting topology in a network including a plurality of communication nodes, comprising:

an annular-path determination process in which, when an arbitrary transmission path is eliminated, at least one of communication nodes located at both ends of a logically unavailable transmission path, other than the eliminated transmission path, determines, as a determining node, whether or not an annular path is formed if the logically unavailable transmission path becomes available by making the logically unavailable transmission path available temporarily; and

a transmission-path restoration process in which, when it is determined in the annular-path determination process that no annular path is formed, at least one of the communication nodes located at both ends of the logically unavailable transmission path maintains the logically unavailable transmission path available.

8. (Original) The method according to claim 7, wherein in the annular-path determination process, the determining node transmits a confirmation signal through the unavailable transmission path, and determines whether or not an annular path is formed by determining whether or not the confirmation signal returns from a transmission path of the determining node other than the unavailable transmission path.

9. (Original) The method according to claim 8, wherein the communication nodes have preset, unique waiting times different from each other, and in the annular-path determination process, the determining node transmits the confirmation signal after the corresponding preset waiting time.

10. (Cancelled)

11. (Previously presented) A communication node forming a network, wherein when an arbitrary transmission path in the network is eliminated and a port of the communication node is connected to a logically unavailable transmission path that is not the eliminated transmission path, the communication node transmits a confirmation signal through the logically unavailable transmission path by making the logically unavailable transmission path available temporarily, and determines whether or not an annular path is formed if the logically unavailable transmission path becomes available by determining whether or not the confirmation signal returns from a transmission path of the communication node other than the logically unavailable transmission path, and

wherein when it is determined that no annular path is formed, the communication node keeps the logically unavailable transmission path available.